## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS

 (Original) A method in a computer system for preventing atypical clinical events related to information identified by DNA testing a person, comprising the steps of:

receiving clinical agent information, the clinical agent information including an identifier of the agent;

determining if a gene is associated with the clinical agent information, and

inquiring if the person has a genetic test result value for the gene, and if not, generating an output including information regarding the likelihood that the person has a gene variant indicative of an atypical event.

- 2. (Original) The method of claim 1, wherein the step of generating the output includes determining if hereditary information for the person is available, and if so, determining if the hereditary information indicates a variation from the risks of the presence of a polymorphism in the general population.
- (Currently Amended) The method of claim 2, wherein the hereditary information includes information selected from one of the groups consisting of gender, race, ethnicity and geographic distribution.
- (Original) The method of claim 2, further comprising the step of obtaining hereditary information relating to the person.

5. (Original) The method of claim 4, wherein the hereditary information is

obtained from an electronic medical record of the person stored within a comprehensive

healthcare system.

6. (Original) The method of claim 2, further comprising the step of initiating a

clinical action if a test result value is not available for the person and the information regarding

the risks indicates a significant risk that the person carries a gene variant associated with an

atypical event.

7. (Original) The method of claim 6, wherein the clinical action is ordering a

genetic test.

8. (Original) A computer system for preventing atypical clinical events related to

information identified by DNA testing a person, comprising:

a receiving component that receives clinical agent information, the clinical agent

information including an identifier of the agent;

a determining component that determines if a gene is associated with the clinical

agent information;

an inquiring component that inquires if the person has a genetic test result value

for the associated gene, and

a generating component that generates an output including information regarding

the likelihood that the person has a gene variant indicative of an atypical event.

Page 3 of 7

9. (Original) The computer system of claim 8, wherein the generating

component includes a first determining component and a second determining component,

wherein the first determining component determines if hereditary information for the person is

available and wherein the second determining component determines if the hereditary

information indicates a variation from the risks of the presence of a polymorphism in the general

population if the first determining component determines that no hereditary information is

available.

10. (Currently Amended) The computer system of claim 9, wherein the

hereditary information includes information selected from one of the groups consisting of

gender, race, ethnicity and geographic distribution.

11. (Original) The computer system of claim 9, further comprising an obtaining

component that obtains hereditary information relating to the person.

12. (Original) The computer system of claim 11, wherein the hereditary

information is obtained from an electronic medical record of the person stored within a

comprehensive healthcare system.

13. (Original) The computer system of claim 9, further comprising an initiating

component that initiates a clinical action if a test result value is not available for the person and

the information regarding the risks indicates a significant risk that the person carries a gene

variant associated with an atypical event.

14. (Original) The computer system of claim 13, wherein the clinical action is

ordering a genetic test.

Page 4 of 7

15. (Original) A computer-readable medium containing instructions for

controlling a computer system for preventing atypical clinical events related to information

identified by DNA testing a person, comprising the steps of:

receiving clinical agent information, the clinical agent information including an

identifier of the agent;

determining if a gene is associated with the clinical agent information, and

inquiring if the person has a genetic test result value for the gene, and if not,

generating an output including information regarding the likelihood that the person has a

gene variant indicative of an atypical event.

16. (Original) The computer-readable medium of claim 15, wherein the step of

generating the output includes determining if hereditary information for the person is available.

and if so, determining if the hereditary information indicates a variation from the risks of the

presence of a polymorphism in the general population.

17. (Currently Amended) The computer-readable medium of claim 16, wherein

the hereditary information includes information selected from one of the groups consisting of

gender, race, ethnicity-and geographic distribution.

18. (Original) The computer-readable medium of claim 16, further comprising

the step of obtaining hereditary information relating to the person.

Page 5 of 7

19. (Original) The computer-readable medium of claim 18, wherein the hereditary information is obtained from an electronic medical record of the person stored within a comprehensive healthcare system.

20. (Original) The computer-readable medium of claim 16, further comprising the step of initiating a clinical action if a test result value is not available for the person and the information regarding the risks indicates a significant risk that the person carries a gene variant associated with an atypical event.

 (Original) The computer-readable medium of claim 20, wherein the clinical action is ordering a genetic test.